

Complete Summary

GUIDELINE TITLE

Notice to readers: updated recommendations of the Advisory Committee on Immunization Practices (ACIP) for the control and elimination of mumps.

BIBLIOGRAPHIC SOURCE(S)

Centers for Disease Control and Prevention (CDC). Notice to readers: updated recommendations of the Advisory Committee on Immunization Practices (ACIP) for the control and elimination of mumps. MMWR Morb Mortal Wkly Rep 2006 Jun 9;55(22):629-30. [PubMed](#)

GUIDELINE STATUS

This is the current release of the guideline.

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SCOPE

DISEASE/CONDITION(S)

Mumps

GUIDELINE CATEGORY

Prevention

CLINICAL SPECIALTY

Family Practice
 Infectious Diseases
 Internal Medicine

Pediatrics
Preventive Medicine

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Health Care Providers
Health Plans
Hospitals
Managed Care Organizations
Nurses
Patients
Physician Assistants
Physicians
Public Health Departments

GUIDELINE OBJECTIVE(S)

To update the 1998 Advisory Committee on Immunization Practices (ACIP) recommendations for mumps vaccination

TARGET POPULATION

Routine vaccination:

One (1) dose of live mumps virus vaccine:

- Preschool-aged children
- Adults not at high risk

Two (2) doses of live mumps virus vaccine:

- School-aged children (i.e., grades K-12)
- Adults at high risk (i.e., persons who work in health-care facilities, international travelers, and students at post-high school educational institutions)

In a mumps outbreak setting:

- Children aged 1 to 4 years and adults at low risk if affected by the outbreak
- Health-care workers born before 1957 without other evidence of immunity

INTERVENTIONS AND PRACTICES CONSIDERED

Vaccination with live mumps virus vaccine (e.g., mumps, measles, rubella [MMR] vaccine)

MAJOR OUTCOMES CONSIDERED

- Effectiveness of 1 dose mumps, measles, rubella (MMR) vaccine in preventing mumps
- Effectiveness of 2 dose MMR vaccine in preventing mumps

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Note from the National Guideline Clearinghouse (NGC) and the Centers for Disease Control and Prevention (CDC): On May 17, 2006, the Advisory Committee on Immunization Practices (ACIP) updated criteria for mumps immunity and mumps vaccination recommendations. According to the 1998 ACIP recommendations for measles, mumps, and rubella (MMR) vaccine, for routine vaccination, a first dose of MMR vaccine is recommended at ages 12 to 15 months and a second dose at ages 4 to 6 years. Two doses of MMR vaccine also are recommended for students attending colleges and other post-high school institutions. However, documentation of mumps immunity through vaccination has consisted of only 1 dose of mumps containing vaccine for all designated groups, including health-care workers.

During January 1-May 2, 2006, the current outbreak in the United States has resulted in reports of 2,597 cases of mumps in 11 states. The outbreak has underscored certain limitations in the 1998 recommendations relating to prevention of mumps transmission in health-care and other settings with high risk for mumps transmission. After reviewing data from the current outbreak and previous evidence on mumps vaccine effectiveness and transmission, ACIP issued updated recommendations for mumps vaccination (see box below).

Key changes to 1998 ACIP recommendations on mumps -- May 17, 2006
Acceptable Presumptive Evidence of Immunity <ul style="list-style-type: none">• Documentation of adequate vaccination is now 2 doses of a live mumps virus vaccine instead of 1 dose for<ul style="list-style-type: none">• School-aged children (i.e., grades K-12).• Adults at high risk (i.e., persons who work in health-care facilities, international travelers, and students at post-high school educational institutions).
Routine Vaccination for Health-Care Workers <ul style="list-style-type: none">• Persons born during or after 1957 without other evidence of immunity: 2 doses of a live mumps virus vaccine.• Persons born before 1957 without other evidence of immunity: consider recommending 1 dose of a live mumps virus vaccine.
For Outbreak Settings <ul style="list-style-type: none">• Children aged 1 to 4 years and adults at low risk: if affected by the outbreak,

Key changes to 1998 ACIP recommendations on mumps -- May 17, 2006

- consider a second dose* of live mumps virus vaccine.
- Health-care workers born before 1957 without other evidence of immunity: strongly consider recommending 2 doses of live mumps virus vaccine.

*Minimum interval between doses = 28 days.

Acceptable Presumptive Evidence of Immunity to Mumps

Acceptable presumptive evidence of immunity to mumps includes one of the following: 1) documentation of adequate vaccination, 2) laboratory evidence of immunity, 3) birth before 1957, or 4) documentation of physician-diagnosed mumps. Evidence of immunity through documentation of adequate vaccination is now defined as 1 dose of a live mumps virus vaccine for preschool-aged children and adults not at high risk and 2 doses for school-aged children (i.e., grades K-12) and for adults at high risk (i.e., health-care workers,* international travelers, and students at post-high school educational institutions).**

*Health-care workers include persons who provide health care to patients or work in institutions that provide patient care (e.g., physicians, nurses, emergency medical personnel, dental professionals and students, medical and nursing students, laboratory technicians, hospital volunteers, or administrative and support staff in health-care institutions).

** The first dose of mumps-containing vaccine should be administered on or after the first birthday; the second dose should be administered no earlier than 1 month (i.e., at a minimum of 28 days) after the first dose. MMR vaccine generally should be used whenever any of its component vaccines are indicated. For children aged 12 months-12 years, combined measles, mumps, rubella, and varicella (MMRV) vaccine can be considered if varicella vaccination is also indicated.

Routine Vaccination for Health-Care Workers

All persons who work in health-care facilities should be immune to mumps. Adequate mumps vaccination for health-care workers born during or after 1957 consists of 2 doses of a live mumps virus vaccine. Health-care workers with no history of mumps vaccination and no other evidence of immunity should receive 2 doses (at a minimum interval of 28 days between doses). Health-care workers who have received only 1 dose previously should receive a second dose. Because birth before 1957 is only presumptive evidence of immunity, health-care facilities should consider recommending 1 dose of a live mumps virus vaccine for unvaccinated workers born before 1957 who do not have a history of physician-diagnosed mumps or laboratory evidence of mumps immunity.

Mumps Outbreak Control

Depending on the epidemiology of the outbreak (e.g., the age groups and/or institutions involved), a second dose of mumps vaccine should be considered for children aged 1 to 4 years and adults who have received 1 dose. In health-care settings, an effective routine MMR vaccination program for health-care workers is

the best approach to prevent nosocomial transmission. During an outbreak, health-care facilities should strongly consider recommending 2 doses of a live mumps virus vaccine to unvaccinated workers born before 1957 who do not have evidence of mumps immunity.

These new recommendations for health-care workers are intended to offer increased protection during a recognized outbreak of mumps. However, reviewing health-care worker immune status for mumps and providing vaccine during an outbreak might be impractical or inefficient. Therefore, facilities might consider reviewing the immune status of health-care workers routinely and providing appropriate vaccinations, including a second dose of mumps vaccine, in conjunction with routine annual disease-prevention measures such as influenza vaccination or tuberculin testing.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence supporting the recommendations is not specifically stated.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

These new recommendations for health-care workers are intended to offer increased protection during a recognized outbreak of mumps.

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

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Use of trade names and commercial sources is for identification only and does not imply endorsement by the U.S. Department of Health and Human Services.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

IMPLEMENTATION TOOLS

Foreign Language Translations
Resources
Slide Presentation

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2006 Jun 1

GUIDELINE DEVELOPER(S)

Centers for Disease Control and Prevention - Federal Government Agency [U.S.]

SOURCE(S) OF FUNDING

United States Government

GUIDELINE COMMITTEE

Advisory Committee on Immunization Practices (ACIP)

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Not stated

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

The Centers for Disease Control and Prevention (CDC), their planners, and content experts wish to disclose they have no financial interests or other relationships with the manufacturers of commercial products, suppliers of commercial services, or commercial supporters. Presentations do not include any discussion of the unlabeled use of a product or a product under investigational use.

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available from the [Centers for Disease Control and Prevention \(CDC\) Web site](#).

Print copies: Available from the Centers for Disease Control and Prevention, MMWR, Atlanta, GA 30333. Additional copies can be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402-9325; (202) 783-3238.

AVAILABILITY OF COMPANION DOCUMENTS

Additional resources are available from the [CDC Web site](#), including multilingual translations.

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on June 2, 2006.

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